

REMARKS

In the Final Office Action of August 5, 2009, claims 11, 13-23, 27-28, 32-33, 39-40, 43, 47, and 52 were rejected under 35 U.S.C. 102(e) as being anticipated by Cropley et al. (US6,811,905).

Claim 55 was rejected under 35 U.S.C. 103(a) as being unpatentable over Cropley et al. in view of Quang et al. (US 4,840,783).

Claims 1-10 were allowed, and claim 12 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In view of the Final Action, RCE has been filed.

Also, in this response, claims 11, 15, and 17-20 have been canceled, claims 13-14 have been amended to further clarify the feature of the invention, and claims 16, 21-23, 27-28, 32, 39, 43, 47, 52, and 55 have been amended to depend from claim 12. Claim 12 has been amended to independent form as suggested by the Examiner. New claims 58-77 have been filed, wherein claims 58-67 are the same as claims 68-77, and correspond to claims 22, 23, 27, 28, 32, 39, 43, 47, 52, 55, respectively, while the dependency is changed.

Briefly explaining, as recited in claims 13 or 14 of the present invention, voltage between the fuel electrode and the oxidizing electrode is adjusted within a certain range so that evolution volume of hydrogen-containing gas from the fuel electrode is adjusted.

In the present invention, it is clearly established that when the energy is withdrawn, the voltage between the fuel electrode and the oxidizing electrode is adjusted to 200-600 mV so that hydrogen-containing gas is generated from the fuel electrode, and that when the energy is provided, the voltage between the fuel electrode and the oxidizing electrode is adjusted to 300-1000 mV

so that hydrogen-containing gas is generated from the fuel electrode.

However, Cropley et al. disclose that  $H_2$  gas is produced in the oxidizing electrode. As such, Cropley et al. never teaches that the hydrogen is produced from the fuel electrode. Furthermore, Cropley et al. does not teach or suggest that the voltage between the fuel electrode and the oxidizing electrode is adjusted within a certain range so that evolution volume of hydrogen-containing gas from the hydrogen generating unit is adjusted.

As to the direct methanol fuel cells (DMFCs) disclosed in Cropley et al., the operation voltage is adjusted within 0.2-0.6 V (see Figs. 7 and 8). However, if hydrogen gas is generated in such a range of the operation voltage, the fuel cell would not serve its purposes as a battery. Thus, no hydrogen gas would be generated.

Claims of the application are patentable over the cited references in the previous Final Action.

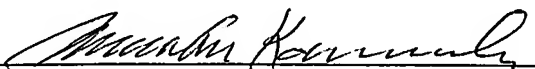
Please examine the application.

One month extension of time is requested. A credit card authorization form in the amount of \$1,888.00 is attached herewith for filing RCE (\$810), 14 dependent claims (\$728) and 1 independent claim (\$220), and one month extension (\$130.00).

If any further fee is required, please charge to Deposit Account No. 11-0219.

Respectfully submitted,

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